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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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11/03/2003

Stefan Raspl

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SAMUEL A. KASSATLY LAW OFFICE
20690 VIEW OAKS WAY
SAN JOSE, CA 95120

EXAMINER

CHEN, TE Y

ART UNIT

PAPER NUMBER

2161

DATE MAILED: 10/17/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/700,908

Applicant(s)

RASPL, STEFAN

Examiner

Susan Y. Chen

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2161

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 21 July 2006.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-26 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-26 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____.

DETAILED ACTION

This office action is in response the amendment filed on July 21, 2006.

Claims 1-26 are pending for examination, claims 1, 11, 14-15 and 21 have been amended.

Claim Rejections - 35 USC § 112

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 15-20, are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

As to claim 15, the claimed "a computer-usable medium" is lacking of antecedent basis.

As to claims 16-20, these claims have the same defects as their base claim, hence are rejected for the same reason.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1-26, are rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. publication No. 2002/0052692 issued to FAHY, in view of U.S. Patent No. 6,636,862 issued to Lundahl et al. (hereinafter referred as Lundahl).

Claim 1-10 and 15-26, are rejected under 35 U.S.C. 102(b) as being anticipated by U.S. publication No. 2002/0052692 issued to FAHY.

Claim 1:

FAHY discloses a method of clustering a set of records, each of the records having attribute values for a set of attributes [e.g., the unit 200, Fig. 3 and associated texts starting at paragraph 0045 at seq.], the method comprising:

for each attribute of the set of attributes, determining a characteristic value for said each attribute, based on attribute values of said each attribute [e.g., the steps: 210-214, Fig. 3];

for each attribute value, determining a deviation from the characteristic value of said each attribute [e.g., the use of K-mean Euclidean distance technique at Paragraph 0047];

for each record, sorting the set of attributes based on deviations of the attribute values, to provide a key [paragraph 0064-0065, Units: 224, 226, Fig. 3]; and

clustering the set of records based on the key [Fig. 4 and associated text starting at paragraph 0072 at seq.].

FAHY does not specifically disclose the details of determining the characteristic value comprises calculating the attribute values of the attribute across the records.

However, Lundahl gives the details to determine the characteristic value comprises calculating the attribute values of the attribute across the records [e.g., col. 2, lines 36-55, Fig. (s) 2-6 and associated texts].

FAHY and Lundahl are both of the same endeavor to optimizing the clustering of a set of records based on the characteristic value of each attributes associated with the record via K-mean Euclidean distance technique [e.g., Lundahl: , thus, with the teachings of FAHY and Lundahl in front of him/her, it would have been obvious for an ordinary skilled person in the art at the time the invention was made to apply the detailed Lundahl's determination processing in Lundahl's system, because by doing so, as suggested by Lundahl, the combined invention will including the dynamically analysis of data that builds into the calculation of a series of computational steps archived through the use of a digital computer program and allows for the incorporation of the

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respective independent qualities of objects into models, and thereby defines predictive relationships between independent objects [Lundahl: col. 2, lines 8 – lines 55].

Claim 2:

except the limitations recited in claim 1, the combined invention of FAHY and Lundahl further discloses the method comprising calculating a mean value of the attribute values of said each attribute as the characteristic value [e.g., FAHY: paragraph 0052].

Claims 3:

except the limitations recited in claim 1, the combined invention of FAHY and Lundahl further discloses a median value of the attribute values of each attribute is determined as the characteristic value [e.g., FAHY: paragraphs: 0057 & 0060].

Claims 4:

except the limitations recited in claim 1, the combined invention of FAHY and Lundahl further discloses determining the deviation comprises calculating a difference between each said attribute value and the characteristic value of each said attribute [e.g., FAHY: Abstract, lines 9-16].

Claim 5:

except the limitations recited in claim 1, the combined invention of FAHY and Lundahl further discloses determining the deviation comprises calculating a difference between said each said attribute value and the characteristic value of the corresponding attribute, and dividing the difference by the characteristic value of said each said attribute [e.g., FAHY: the “ration” column of Fig. 8, paragraph 0076].

Claim 6:

except the limitations recited in claim 1, the combined invention of FAHY and Lundahl further discloses sorting the set of attributes comprises using absolute values of the deviations of the attribute values as a sorting criterion [e.g., FAHY: paragraph 0026 & 0028].

Claim 7:

except the limitations recited in claim 1, the combined invention of FAHY and Lundahl further discloses that a first record of the set of records contains a first key and a second record of the set of records contains a second key; and further comprising placing the first key and the second key into a single cluster if the first key and the second key have identical sub-sequences of a first length [e.g., FAHY: Fig. 8 and associated texts].

Claim 8:

except the limitations recited in claim 1, the combined invention of FAHY and Lundahl further discloses that first record of the set of records contains a first key and a second record of the set of records contains a second key; and further comprising placing the first key and the second key into a single cluster if the first key and the second key have identical sub-sequences of absolute values of the deviations [e.g., FAHY: Fig. 9 and associated texts].

Claim 9:

except the limitations recited in claim 1, the combined invention of FAHY and Lundahl further discloses that a first record of the set of records contains a first key that has a first sub-sequence, and a second record has a second sub-sequence contains a second key; and further comprising placing the first key and the second key into a single cluster if the first and second sub-sequences comprise the same set of attributes [e.g., FAHY: paragraph: the single linkage agglomeration technique at 0059].

Claim 10:

except the limitations recited in claim 9, the combined invention of FAHY and Lundahl further discloses that the first and second sub-sequences comprise the same set of attributes irrespective of a sign of the deviations of the attribute values [e.g., FAHY: paragraph: 0028, Note the absolute value of an attribute is irrespective of a sing].

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Claim 11:

except the limitations recited in claim 9, the combined invention of FAHY and Lundahl further discloses that identifying a cluster having a smallest number of records [e.g., col. 14, lines 25 – 40, Fig. 3 and associated texts]; and for each record of the identified cluster searching another cluster having records with best matching keys [e.g., Lundahl: col. 15, lines 2-17, Fig. 3 and associated texts].

Claim 12:

except the limitations recited in claim 11, the combined invention of FAHY and Lundahl further discloses reducing a length of the first sub-sequence and a length of the second sub-sequence in order to find a best match [e.g., FAHY: paragraph 0010; Friend: col. 24, lines 1-31].

Claim 13:

except the limitations recited in claim 11, the combined invention of FAHY and Lundahl further discloses using a distance measure to find another cluster for a record of the identified cluster [e.g., FAHY: Abstract, lines 9-16; Friend: col. 24, lines 1-31].

Claim 14:

except the limitations recited in claim 11, the combined invention of FAHY and Lundahl further discloses the distance measure comprises a Euclidean distance [e.g., FAHY: 0054, Friend: Col. 14, line 63-67].

Claim 15:

This claim incorporates substantially similar subject matter as claim 1 in form of computer program product, hence is rejected along the same rational.

Claim 16:

This claim incorporates substantially similar subject matter as claim 2 in form of computer program product, hence is rejected along the same rational.

Claim 17:

This claim incorporates substantially similar subject matter as claim 3 in form of computer program product, hence is rejected along the same rational.

Claim 18:

This claim incorporates substantially similar subject matter as claim 4 in form of computer program product, hence is rejected along the same rational.

Claim 19:

This claim incorporates substantially similar subject matter as claim 5 in form of computer program product, hence is rejected along the same rational.

Claim 20:

This claim incorporates substantially similar subject matter as claim 6 in form of computer program product, hence is rejected along the same rational.

As to claims 21-26, these claims recite similar subject matter as claims 1-6 and 15-20 in form of an abstract computer system, hence are rejected along the same rational.

Response to Arguments

Applicant's arguments with respect to claims 1-26, have been considered but are moot in view of the new ground(s) of rejection.

Conclusion

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any

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extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Points of Contact

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Susan Y. Chen whose telephone number is 571-272-4016. The examiner can normally be reached on Monday - Friday from 7:00-4:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Jeff Gaffin can be reached on 571-272-4146. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Susan Y Chen
Examiner
Art Unit 2161

October 6, 2006

[Handwritten Signature]
Apur Majumdar
Primary Examiner
TC 2100